Applicant : Ronald P. Knockeart et al.   Attorney Docket: 09650-005009 / 2003P13043US
Serial No. : 10/675,626
Filed   : September 30, 2003
Page   : 6 of 10

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REMARKS

Below, the applicant's comments are preceded by related remarks of the examiner set forth in small bold type.

Claims 24-27 and 38-53 are rejected under 35 USC 102(b) as being anticipated by Mandhyan et al.

Mandhyan et al disclose the claimed method for collecting traffic information including reporting only instances of abnormal speed. During a calibration stage which meets the scope of the claimed method of logging traffic related data, information is gathered and collected as a plurality of vehicles traverse the predetermined routes (Fig. 1 and "calibration phase" starting at col. 3, line 58). During a monitoring phase which meets the scope of the claimed method of notification, a vehicle automatically reports speeds which are out of bandwidth for that time and place (Fig. 2 and "monitoring phase" beginning at col. 8, line 53). Mandhyan et al disclose time variation of the monitored data relating to speed, logging and transferring of position, time and other characteristics from the monitoring vehicles to the central station, and vehicle notification transmission upon detection of an abnormal condition.

Mandhyan does not disclose or suggest "storing a map of a road network at a vehicle, the road network having a plurality of segments, the map including stored speed for at least some of the segments ... for each detected segment, comparing the vehicle's speed on the segment to a stored speed for that segment," as recited in amended claim 24. While Mandhyan discloses vehicles 10 that have GPS receivers 12 to determine where the vehicles are, Mandhyan does not disclose or suggest that the vehicles store maps of a road network having stored speed for some of the road segments.

Mandhyan discloses a traffic monitoring system in which a computer 18 stores time and position readings that are recorded as latitudes and longitudes (col. 4, lines 18-22). The data from calibration vehicles are analyzed to determine patterns of mean speed and bandwidth of the spectrum of the speed signals, then in the monitoring phase, probe vehicles are deployed to report speeds that are out of bandwidth for that time and place (abstract). Mandhyan discloses an example in which most or all of the probe vehicles are expected to be routinely traveling the desired roadway route segments (col. 3, lines 20-23). Examples of probe vehicles include commuter buses and delivery vehicles, which are selected because they will normally or

frequently be operating on routes of interest at times of interest (col. 7, lines 43-47). The vehicles in Mandhyan store speed and position information of a particular route, but do not store a map of a road network having a plurality of segments, in which the map includes stored speed for at least some of the segments.

Claim 25 is patentable for at least similar reasons as claim 24.

The dependent claims are patentable for at least the same reasons as the claims on which they depend.

Claims 24-27 and 38-53 are rejected under 35 USC 102(e) as being anticipated by Noecker et al.

Noecker et al disclose the claimed method for collecting traffic information including reporting a traffic situation when the actual position and/or drive duration deviates by more than a respective definable threshold value from the expected position or drive duration (col. 2, line 23 – col. 3, line 16). The expected duration is not fixed but is defined as a variable which depends on time of day/week since the system must take into account different traffic densities and/or road conditions that fluctuate as a function of the time of day, week and/or season (col. 3, lines 17-27). Noecker et al measure a position at various points and determine distances there between and simultaneously measure the time duration between the two points. The distance traveled and the elapsed time information are an indication of speed along the segment associated there between.

Noecker does not disclose or suggest "receiving a command from the server to enable transmission of the traffic-related data," as recited in claim 24. By requiring the vehicle to receive a command from the server to enable transmission of a traffic notification, the server can control which vehicles can report traffic notifications. For example, as recited in new claim 54, the server may enable the vehicle to transmit traffic-related data if the server has provided planned routes along the road network to the vehicle.

Rather, Noecker discloses "triggering a traffic situation data reporting operation only if the actual position and/or actual drive duration deviates by more than a respective definable threshold value from the position to be expected or drive duration to be expected" (col. 8, lines 12-15). In Noecker, whether a vehicle reports a traffic situation depends on whether the deviation is larger than a threshold, and does not depend on a command from the server.

Claim 25 is patentable for at least similar reasons as claim 24.

The dependent claims are patentable for at least the same reasons as the claims on which they depend.

> Claims 25-27 and 45-53 are rejected under 35 USC 102(b) as being anticipated by Fleck et al. (WO 986/29688, US equivalent translation 6,012,012).
>
> Fleck et al disclose the claimed method for collecting traffic data. Reference will be made to the US equivalent document. The operation is described in col. 4, lines 2-34, including defining the road segments on a map, definition of the attributes to be detected, measuring and storing the attributes, and transmission to a service center.

Fleck does not disclose or suggest "storing a map of a road network at a vehicle, the road network having a plurality of segments, the map including stored speed for at least some of the segments; ... for each detected segment, comparing the vehicle's speed on the segment to a stored speed for that segment," as recited in amended claim 25.

Fleck discloses that terminals can have digital road maps (col. 7, line 12), and have application software that has functions including "determination of the travel through a predefined segment of roadway, determination of the current speed or travel time between two positions" (col. 6, lines 44-47). However, Fleck does not disclose or suggest that the map stored in the vehicle includes stored speed for at least some of the road segments, and that for each road segment that the vehicle travels, compare the vehicle's speed on the segment to a stored speed for that segment.

The dependent claims are patentable for at least the same reasons as the claims on which they depend.

> Claims 24-27, 38-40, 44-46 and 48-50 are rejected under 35 USC 102(b) as being anticipated by Golding.
>
> Golding discloses the claimed method for collecting traffic information including reporting deviations of speed from a stored value of speed (col. 5, lines 18-26) for a particular street segment. Additionally, Golding discloses logging traffic related-data, including speed for street segments, and transfer to the central database (col. 5, lines 5-20). As speed is defined as the change in distance per unit of time, the travel time information for street segments of known distance is clearly proportional thereto.
>
> Claims 41-43, 47, and 51-53 are rejected under 35 USC 103(a) as being unpatentable over Golding in view of Peterson.

Applicant : Ronald P. Knockeart.et al.   Attorney Docket: 09650-005009 / 2003P13043US
Serial No. : 10/675,626
Filed : September 30, 2003
Page : 9 of 10

Golding does not disclose or suggest "receiving a command from the server to enable transmission of the traffic-related data," as recited in amended claim 24. Rather, Golding discloses periodic transmission from the data collector 12 to the central database 2, or transmission from the data collector to the central database when the measured travel time is outside of a certain threshold of the currently estimated travel time (col. 5, lines 16-26).

What is lacking in Golding is also not disclosed or suggested in Peterson, which discloses using rate sensors that are positioned along route segments to detect traffic.

Claim 25 is patentable for at least similar reasons as claim 24.

The dependent claims are patentable for at least the same reasons as the claims on which they depend.

Any circumstance in which the applicant has addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner. Any circumstance in which the applicant has made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims. Any circumstance in which the applicant has amended a claim does not mean that the applicant concedes any of the examiner's positions with respect to that claim or other claims.

Please apply $450 for the Petition for Extension of Time fee and any other charges to deposit account 06-1050, referencing attorney docket 09650-005009.

Applicant : Ronald P. Knockeart et al. Attorney Docket: 09650-005009 / 2003P13043US
Serial No. : 10/675,626
Filed : September 30, 2003
Page : 10 of 10

Respectfully submitted,

Date: _12/20/2004_ _Rex Huang_

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See attached document certifying that Rex Huang has limited recognition to practice before the U.S. Patent and Trademark Office under 37 CFR § 10.9(b).

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